What is claimed is:

1. A method of reducing the number of filter cells which require updating in a channel equalizer of a communication system, comprising:

filtering a data sequence into a plurality of data values for storage in a plurality of filter cells having a plurality of adjustable coefficients;

deriving an optimum value of at least one coefficient among the coefficients;

updating said at least one coefficient with the derived optimum value to provide an updated coefficient value; and

comparing the updated coefficient value to a given threshold to eliminate at least one of the filter cells from having to be updated.

2. The method of claim 1, further comprising setting a filter cell having an updated coefficient value to zero, if the updated coefficient value is less than the threshold.

3. The method of claim 1, wherein said deriving is performed during said filtering of said data sequence.

4. A channel equalizing method comprising:

filtering a data sequence into a plurality of data values for storage in a plurality of filter cells having a plurality of adjustable coefficients;

deriving an optimum value of at least one coefficient among the coefficients based on a training sequence associated with the data sequence currently being filtered and a known training sequence;

updating said at least one coefficient based on the obtained optimum value, a Kalman gain and a difference between the transmitted training sequence and known training sequence to provide an updated coefficient value;

comparing the updated coefficient value to a given threshold; and

reducing the number of filter cells with coefficients to be updated, based on the comparison.

5. The method of claim 4, wherein said reducing includes setting a filter cell with an updated coefficient value to zero, if said updated coefficient value is less than the threshold.

6. A coefficient updating circuit of a channel equalizer in a communication system, comprising:

storage means storing coefficients related to data values of a received data sequence, at least one data value of said received data sequence received in one of a plurality of filter cells, each filter cell having a coefficient related to the stored data value;

update means updating said coefficients based on at least one parameter;

compare means comparing said updated coefficients to a threshold; and

selecting means selecting filter cells of selected coefficients based on said comparison.

7. The circuit of claim 6, wherein said received data sequence includes an associated training sequence, further comprising:

deriving means determining an optimum value for each coefficient based on the training sequence and a known training sequence.

8. The circuit of claim 7, wherein said updating means updates said coefficients based on one or more of said optimum value, a Kalman gain value and a difference value between the associated training sequence and known training sequence.

9. The circuit of claim 6, wherein said compare means

sets an updated coefficient to zero, if a value of said updated coefficient is less than said threshold, else

selects filter cells to be updated, for updated coefficients equal to or exceeding said threshold.

10. A channel equalizer, comprising:

a filtering circuit filtering of a data sequence and having a plurality of filter cells to received data values of said filtered data sequence, each filter cell having an adjustable coefficient; and

a coefficient updating circuit for deriving an optimum value of at least one coefficient among a plurality of coefficients during said filtering, determining an updated coefficient value based on the optimum value, comparing the updated coefficient value to a given threshold, and setting a filter cell having an updated coefficient value to zero, if the updated coefficient is less than said threshold.

11. A channel equalizer, comprising:

a filtering circuit filtering of a data sequence and having a plurality of filter cells to received data values of said filtered data sequence, each filter cell having an adjustable coefficient; and

a coefficient updating circuit deriving an optimum value for at least one coefficient among a plurality of coefficients during said filtering based on a training sequence associated with said data sequence that is currently being filtered and a known training sequence, determining an updated coefficient value based on the optimum value, a Kalman gain, and a difference between the associated training sequence and known training sequence, comparing the updated coefficient value to a given threshold, and reducing the number of the filter cells having coefficients to be updated, based on the comparison.

12. An apparatus which implements channel equalization in a communication system in accordance with the method of claim 1.

13. An apparatus which implements channel equalization in a communication system in accordance with the method of claim 4.

14. A channel equalizer in a communication system operating in accordance with the method of claim 1.

15. A channel equalizer in a communication system operating in accordance with the method of claim 4.